

REMARKS

Reconsideration of the above-identified application in view of the following remarks is respectfully requested.

A. Status of the Claims And Explanation Of Amendments

As to preliminary matters, two drawing objections were made in the Office Action. First, it was noted that an “optical integrator 30” was referenced in the specification, but allegedly not shown in the Figures. By this paper, a replacement Figure 1 showing the optical integrator as reference numeral 30 is provided. Second, it was noted that an “illumination area detector 60” was references in the specification, but allegedly not shown in the Figures. Applicant notes that reference numeral 60 was shown in originally-filed Figure 1. Nonetheless, a replacement figure 1 is enclosed more particularly identifying that detector. Withdrawal of these objections is requested.

Claims 1-3, 12, 14-16 have been amended. Claims 1 and 14-16 have been amended to recite, *inter alia*, “wherein the first and second stop plates are rotatable around an optical axis of the light.” Additional conforming amendments were made to the other claims. Support for these amendments is found throughout the specification and claims as originally filed.

No new matter will be added to this application by entry of these amendments.

As to the merits, Claims 1-16 are pending and were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,603,533 to Go (“Go”).

B. Claims 1-16 Are Patentably Distinct From Go

The rejections of claims 1-16 are respectfully traversed. Applicant’s claim 1 recites:

1. An illuminating optical system for illuminating a mask using light from a light source, said illumination optical system comprising:

a shape varying mechanism for continuously varying a shape of an effective light source,

wherein said shape varying mechanism comprises:

a first stop plate that has a first aperture part for allowing the light to pass through the first aperture part; and

a second stop plate that has second aperture part for allowing the light that has passed through the first stop plate through the second aperture part, and

wherein the first and second stop plates are rotatable around an optical axis of the light.

As discussed below, Go fails to teach, disclose or suggest “the first and second stop plates are rotatable around an optical axis of the light” as recited in Applicant’s independent claim 1. Because all of the elements are not shown in the cited reference, the rejection is improper and should be withdrawn.

Go is directed to an irradiation control method and associated apparatus. As shown in Figure 1, Go’s apparatus has a laser beam source (16), a beam shaping optical system (18), a rough energy adjuster (20), a fly eye lens (22), and an illumination-optical-system aperture stop plate (24) as well as other components. Col. 5, lns. 30-36. The rough energy adjuster is designed to shapes the cross-sectional shape of the laser beam to ensure it “efficiently enters the fly eye lens 22.” Col. 5, lns. 42-48. Gore also discloses a rotational plate (34). Col. 5, lns. 45-49 and Fig. 1. However, this rotational plate (34) rotates around an off-axis center.

Accordingly, Go fails to teach, disclose or suggest “the first and second stop plates are rotatable around an optical axis of the light” as recited in Applicant’s independent claim 1. For at least this reason, independent claim 1 is asserted to be patentably distinct from

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Go, and for at least similar reasons independent claims 14-16 and dependent claims 2-13 also are asserted to be patentably distinct from Go. Allowance is requested.

CONCLUSION

For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is requested. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 13-4500, ORDER NO. 1232-5090.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

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By: _____


Matthew K. Blackburn
Registration No. 47,428

Correspondence Address:
MORGAN & FINNEGAN, L.L.P.
3 World Financial Center
New York, NY 10281-2101
(212) 415-8700 Telephone
(212) 415-8701 Facsimile